

ABSTRACT OF THE DISCLOSURE

With a A synthesis furnace having has a furnace chamber surrounded by a circumferential furnace wall, in which a plurality of burners are disposed essentially in one plane, with burner exit direction directed downward, and a plurality of reaction tubes are disposed essentially vertically and parallel to one another. The are disposed, whereby the reaction tubes are heated from the outside; externally by means of the firing ignited burners. To improve; the heat distribution and the entire heat transfer are supposed to be improved in as simple a manner as possible, in terms of design and control technology, at least the outer burners disposed in the vicinity of the furnace wall have a burner exit direction that runs at an incline away from the center of the furnace in relation to the vertical.

This is achieved in that at least the outer burners (5) disposed in the region of the furnace wall (2) have a burner exit direction (R) that is inclined relative to the vertical, leading away from the center of the furnace.

Drawing to be published with this: Fig. 1.